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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1   1.   (Currently amended): A method for collecting data from among a

2 plurality of data sites, each data site having an associated data store, the method comprising:

3   providing each data site with a corresponding extraction routine;

4   for each data site, processing data contained in its associated data store in

5 accordance with its corresponding extraction routine to produce first data, the corresponding

6 extraction routine configured to store the first data in a storage location at the data site if the

7 processing produces first data;

8   collecting second data from those data sites for which their corresponding

9 extraction routines produced first data, the second data being based on the first data; and

10   loading all of the second data into a database,

11   <u>wherein the step of collecting includes communicating the first data to a central</u>

12 <u>site in accordance with a remote copy operation, receiving at the central site the first data as</u>

13 <u>mirrored data, and transforming the mirrored data to produce the second data, the second data</u>

14 <u>being stored at the central site.</u>

          2.   (Canceled)

1   3.   (Original): The method of claim 2 wherein the step of collecting

2 comprises, at each data site that has first data, performing a data backup procedure on the first

3 data, wherein the central site is viewed as a backup site.

1   4.   (Original): The method of claim 2 wherein the step of communicating the

2 first data includes signaling the central site at time when the remote copy operation is complete,

3 the step of transforming the mirrored data being initiated in response to the central site being

4 signaled.

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1   5.   (Original): The method of claim 1 wherein the step of collecting includes:

2   transforming the first data to produce the second data, the second data being stored at the data

3   site; communicating the second data to a central site in accordance with a remote copy operation,

4   and receiving at the central site the second data as mirrored data.

1   6.   (Original): The method of claim 1 further comprising providing each data

2   site with a corresponding remote copy program.

1   7.   (Original): The method of claim 1 further including providing each data

2   site with a corresponding transformation routine, and for each data site having first data

3   processing the first data by executing its corresponding transformation routine to produce the

4   second data.

1   8.   (Original): The method of claim 1 wherein the step of providing a

2   corresponding extraction routine comprises, for each data site:

3   receiving a specification information which is descriptive of data stored in a data

4   store associated with the data site;

5   producing the extraction routine based on the specification information; and

6   communicating the extraction routine to the data site.

1   9.   (Original): The method of claim 1 wherein the step of providing a

2   corresponding extraction routine comprises, for each data site:

3   receiving a first specification information which is descriptive of data stored in its

4   associated data store;

5   producing a second specification information which is descriptive of the

6   extraction routine;

7   communicating the second specification information to the data site; and

8   producing, at the data site, the extraction routine based on the second specification

9   information.

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1   10.   (Original): The method of claim 9 wherein the second specification

2   information is source code.

1   11.   (Original): A data collection system comprising a plurality of remote data

2   sites and a data collection site, the remote data sites and the data collection site configured to

3   operate according to the method of claim 1.

1   12.   (Original): A data collection system comprising:

2   a central data site comprising at least one host processor;

3   a host storage system operatively coupled to the at least one host processor;

4   at least one remote data site comprising at least one remote processor; and

5   a remote storage system operatively coupled to the at least one remote processor,

6   the at least one host processor having program generating code configured to:

7   obtain storage related parameters from the at least one remote data site;

8   generate first interim volume managing code;

9   generate second interim volume managing code;

10   generate a data extraction routine based on the storage related parameters;

11   generate remote copy control code based on the storage related

12   parameters; and

13   transfer the second interim volume managing code, the data extraction

14   routine, and the remote copy control code to the at least one remote data site,

15   the at least one host processor further having program manager code configured to

16   initiate processing of the second interim volume managing code, the data extraction routine, and

17   the remote copy control code,

18   the data extraction routine configured to produce extracted data,

19   the remote copy control code configured to perform a data duplication operation

20   of the extracted data, wherein the central data site serves as the duplication site for the extracted

21   data,

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22   the first interim volume managing code configured to allocate a host interim

23   volume in the host storage system for storing at least some of the extracted data,

24   the second interim volume managing code configured to allocate a remote interim

25   volume in the remote storage system for storing the extracted data.

1   13.   (Original): The system of claim 12 wherein the data duplication operation

2   is a remote copy operation.

1   14.   (Original): The system of claim 12 wherein the at least some of the

2   extracted data is copied to the central data site as the result of a data mirroring operation.

1   15.   (Original): The system of claim 12 wherein data extraction routine

2   includes a size calculation component to produce a data size metric indicative of the size of the

3   extracted data, the data size metric being communicated to the first interim volume managing

4   code and to the second interim volume managing code, wherein the host interim volume is

5   allocated based at least on the data size metric and the remote interim volume is allocated based

6   at least on the data size metric.

1   16.   (Original): The system of claim 15 wherein the host interim volume has a

2   flag associated with the remote data site, the remote copy control code further configured to set

3   the flag to a first value when performing the backup operation and to set the flag to a second

4   value when the backup operation has completed.

1   17.   (Currently amended): A method for collecting data from among a

2   plurality of remote data sites comprising:

3   producing extraction routines, each extraction routine corresponding to a remote

4   data site, each extraction routine configured to process data stored at its corresponding remote

5   data site, the extraction routine further configured to store any data produced thereby at its

6   corresponding remote data site;

7   communicating each extraction routine to its corresponding remote data site;

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8   initiating execution of each extraction routine to process the data stored at its

9   corresponding remote data site wherein if extracted data is produced then it is stored at its

10   corresponding remote data site, each extraction routine being executed at its corresponding

11   remote data site;

12   receiving processed data from each remote data site that produced extracted data,

13   the processed data being based on the extracted data; and

14   incorporating the processed data into a collection of information,

15   wherein the collection of information is stored at a collection site and the

16   extraction routines are produced at the collection site.

1   18.   (Original): The method of claim 17 wherein the step of incorporating

2   comprises transforming the processed data to produce transformed data and loading the

3   transformed data into a database.

1   19.   (Original): The method of claim 17 further including producing

2   transformation routines, wherein the step of transforming the processed data includes applying

3   the transformation routines to the processed data.

1   20.   (Original): The method of claim 19 wherein receiving processed data

2   includes detecting an indication that the processed data from a remote data site has been

3   communicated therefrom and wherein transforming the processed data is performed in response

4   to the indication.

         21.   (Canceled)

1   22.   (Original): The method of claim 17 further comprising:

2   producing transformation routines, each transformation routine corresponding to

3   one of the remote data sites, the transformation routine further configured to store any data

4   produced thereby at its corresponding remote data site; and

5   communicating each transformation routine to its corresponding remote data site,

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6   each transformation routine configured to process the extracted data stored at its

7   corresponding remote data site to produce transformed data,

8   the processed data being representative of the transformed data.

1   23.   (Original): The method of claim 22 wherein the collection of information

2   is stored at a collection site and wherein the transformation routines are produced at a collection

3   site.

1   24.   (Original): The method of claim 17 further comprising producing a

2   remote copy control routine for each of the remote data sites and communicating each remote

3   copy control routine to its corresponding remote data site.

1   25.   (Original): The method of claim 17 further comprising:

2   creating a storage volume for storing the processed data;

3   receiving size information from one or more of the remote data sites, the size

4   information representative of the size of its corresponding extracted data; and

5   allocating space for the storage volume based on the size information.

1   26.   (Original): An ETL (extraction, transformation, loading) tool configured

2   to perform the method of claim 17.

1   27.   (Original): A data collection system comprising:

2   a data processing component;

3   a data storage component; and

4   computer program code configured to execute on the data processing component,

5   the computer program code configured to perform steps of:

6   receiving first information which specify extraction routines, each

7   extraction routine corresponding to a remote data site, each extraction routine configured

8   to process data stored at its corresponding remote data site, the extraction routine further

9   configured to store any data produced thereby at its corresponding remote data site;

10   communicating to each of the remote data sites a corresponding second

11   information, the second information representative of the extraction routine

12   corresponding to the remote data site, whereby an extraction routine is provided at each

13   of the remote data sites; and

14   initiating execution of each extraction routine to process the data stored at

15   its corresponding remote data site wherein if extracted data is produced then it is stored at

16   its corresponding remote data site, each extraction routine being executed at its

17   corresponding remote data site,

18   a portion of the data storage component being configured to receive processed

19   data from each remote data site that produced extracted data, the processed data being received

20   as mirrored data resulting from a data mirroring operation performed at the remote data sites, the

21   processed data being based on the extracted data,

22   the computer program code further configured to perform a step of incorporating

23   the mirrored data into a database.

1   28.   (Original): The system of claim 27 wherein the computer program code

2   includes an ETL (extraction, transformation, loading) tool, the ETL tool configured to produce a

3   plurality of extraction routines as the second information.

1   29.   (Original): The system of claim 27 wherein the step of incorporating the

2   mirrored data includes transforming the mirrored data to produce transformed data and loading

3   the transformed data into the database.

1   30.   (Original): The system of claim 27 wherein the computer program code is

2   further configured to:

3   produce transformation routines, each transformation routine corresponding to

4   one of the remote data sites, the transformation routine further configured to store any data

5   produced thereby at its corresponding remote data site; and

6   communicate each transformation routine to its corresponding remote data site,

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7   each transformation routine configured to process the extracted data stored at its

8 corresponding remote data site to produce transformed data,

9   the processed data being representative of the transformed data.

1   31.   (Currently amended): A method for processing data at a remote site to

2 produce data suitable for integration at a data collection site comprising:

3   obtaining an extraction routine at a remote site, the extraction routine suitable for

4 extracting data from a data store at the remote site, the extraction routine configured to execute

5 on a data processor at the remote site;

6   detecting a first signal and in response thereto, performing a data extraction

7 operation by applying the extraction routine to the data to produce extracted data;

8   storing a first representation of the extracted data at the remote site; and

9   <u>communicating the first representation of the extracted data to the data collection</u>

10 <u>site for subsequent integration by</u> performing a backup operation of the first representation of the

11 extracted data wherein the data is backed up to the data collection site.

1   32.   (Original): The method of claim 31 wherein the first representation of the

2 extracted data is the extracted data itself, wherein a subsequent transformation operation and a

3 loading operation are performed at the collection site.

1   33.   (Original): The method of claim 31 further comprising determining a size

2 of the data to be extracted and creating a logical volume having a storage capacity based on the

3 size of the data to be extracted, wherein the first representation of the extracted data is stored on

4 the logical volume.

1   34.   (Original): The method of claim 33 further comprising determining a size

2 of the logical volume and communicating the size of the logical volume to the collection site,

3 prior to the step of performing a backup operation, wherein the collection site can allocate

4 storage thereat based on the size of the logical volume in order to store the first representation o

5 of the extracted data.

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1   35.   (Original): The method of claim 31 further comprising receiving a

2   transformation routine and applying the transformation routine to the extracted data to produce

3   transformed data, the first representation comprising the transformed data, wherein the

4   transformed data is backed up to the collection site.

1   36.   (Original): The method of claim 31 wherein the step of obtaining an

2   extraction routine comprises receiving the extraction routine in executable form.

1   37.   (Original): The method of claim 36 wherein the extraction routine is

2   received from the collection site.

1   38.   (Original): The method of claim 31 wherein the step of obtaining an

2   extraction routine comprises receiving a representation of the extraction routine and generating

3   an executable form of the extraction routine from the representation.

1   39.   (Currently amended): A data storage facility configured to produce data

2   suitable for integration at a data collection site comprising:

3   a data processing component;

4   a data storage component; and

5   computer program code configured to perform steps of:

6   obtaining an extraction routine, the extraction routine suitable for

7   extracting first data from the data storage component, the extraction routine configured to

8   execute on the data processing component;

9   detecting a first signal and in response thereto, performing a data

10   extraction operation by applying the extraction routine to the first data to produce

11   extracted data; and

12   storing a first representation of the extracted data on the data storage

13   component,

14   the data storage component being configured to <u>communicate the first</u>

15   <u>representation of the extracted data to the data collection site for subsequent integration by</u>

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16 performing a backup operation of the first representation of the extracted data wherein the data is

17 backed up to the data collection site.

1   40.   (Original): The data storage facility of claim 39 wherein the computer

2   program code is further configured to receive a representation of the extraction routine and to

3   generate the extraction routine based on the representation, thereby obtaining the extraction

4   routine.

1   41.   (Original): The data storage facility of claim 39 wherein the data storage

2   component is further configured to perform a backup operation upon detecting an indication, the

3   indication being produced at the collection site.

1   42.   (Original): A system for collecting data from among a plurality of data

2   sites comprising:

3   means for receiving first information specifying a data extraction routine, wherein

4   a plurality of data extraction routines can be produced, each data extraction routine

5   corresponding to a remote data site, each data extraction routine being configured based on data

6   contained at its corresponding remote data site;

7   means for communicating second information to each of the remote data sites, the

8   second information representative of its corresponding data extraction routine, wherein each data

9   extraction routine is executed at its corresponding remote data site;

10   means for signaling at least one of the data extraction routines to process data at

11 its corresponding remote data site to produce extracted data, wherein the at least one each of the

12 data extraction routines is configured to store extracted data in a data store at its corresponding

13 remote data site;

14   means for receiving extracted data from each of the remote data sites as mirrored

15 data;

16   means for transforming mirrored data to produce transformed data; and

17   means for loading transformed data into a data store.

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1   43.   (Original): The system of claim 42 wherein the second information

2 constitutes the data extraction routine.

1   44.   (Original): The system of claim 42 wherein the second information

2 comprises a first representation of the data extraction routine, wherein the corresponding remote

3 data site can produce the data extraction routine based on the first representation.

1   45.   (Original): The system of claim 42 further including means for producing

2 a remote copy control routine for each of the remote data sites and means for communicating the

3 remote copy control routines to the remote data sites.

1   46.   (Currently amended): A data storage facility configured to produce data

2 suitable for integration at a data collection site comprising:

3   means for obtaining an extraction routine at the remote site, the extraction routine

4 suitable for extracting data from a data store at the remote site, the extraction routine configured

5 to execute on a data processor at the remote site;

6   means for detecting a first signal and in response thereto for performing a data

7 extraction operation by applying the extraction routine to the data to produce extracted data;

8   means for storing a first representation of the extracted data at the remote site; and

9   means for communicating the first representation of the extracted data to the data

10 collection site for subsequent integration by performing a backup operation of the first

11 representation of the extracted data wherein the data is backed up to the data collection site.

         47.   (Original): The data storage facility of claim 46 further including means
for obtaining a transformation routine at the remote site, means for applying the transformation
routine to the extracted data to produce transformed data, the first representation of the extracted
data being the transformed data.